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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,239	07/10/2003	Masahiro Ohgami	A35901 074224.0114	2852
21003	7590	11/04/2004	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			YEE, DEBORAH	
			ART UNIT	PAPER NUMBER
			1742	
DATE MAILED: 11/04/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,239

Applicant(s)

OHGAMI ET AL.

Examiner

Deborah Yee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-14-03 12-11-03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: IDS 5-03-04 8-05-02.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(a) as being anticipated by Jeong et al. (US Patent 6,686,061).

3. Jeong discloses specific examples of steel welded pipes, CS 1 to 4 in Tables 1, having a composition which meets the recited claim and has a microstructure of ferrite and pearlite wherein the ferrite has grain size (FGS) ranging 22 to 35 microns. Even the CS 1 to 4 are comparative samples, they are still known in the art and can be used as prior art.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 to 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al. (US Patent 6,686,061).

3. Jeong in claim 20 of column 28 discloses a weldable structural steel product having a composition with constituents whose wt% ranges overlap those recited by the claims 1 and 4 to 6; such overlap renders applicant's composition prima facie obvious because it would have been obvious to one of ordinary skill in the art to select the claimed ranges from the broader disclosure of the prior art because the prior art has the same utility, to make a welded steel pipe.
4. Moreover, prior art steel has a ferrite and pearlite microstructure having a grain size of 20 microns or less which overlaps with applicant's ferrite range of at least 20 microns recited in claim 1, and pearlite range of not larger than 20 microns recited in claim 3.
5. In regard to claim 3, the prior art steel pipe would be expected to have spheroidized (rounded) grains since grain size is very fine.
6. Claims 1 to 3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 11-256268 cited in IDS dated 12-11-03.
7. JP'268 discloses specific steel alloy examples A and B in Table 1 on page 5 which meet the claimed composition. Moreover, similar to the present invention, the English abstract of JP268 teaches that the steel alloy has a microstructure of ferrite with a grain size of at least 20 microns interspersed with spheroidized carbides (equivalent to cementite) with a very fine grain size of 0.4 to 1 microns .
8. Although JP'268 does not specifically teach a steel in the form of a pipe as recited by the claims, such would not be a patentable difference since it would be a

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matter of choice well within the skill of the artisan to shape steel into any form depending on the application of use.

9. Claims 7 to 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada et al (US Patent 5,948,183) or Japanese patent 9-165644 cited in IDS dated 8-14-03.

10. Each reference teaches a ferritic/ bainitic steel pipe having a composition which meets the recited claims 7 to 10 and exhibits low yield ratio with high strength. See Okada in Tables 1-1 to 1-3 and 3-1 and 3-1 and JP'644, Tables 1 and 2.

11. Although prior art does not teach an average ferrite grain size of at least 20 microns as recited by claim 7 or the 1 to 15vol% bainite recited in claim 8, such would be expected because the composition is met and the tensile strength and low yield ratio values are closely equivalent to those disclosed in Table 4 on page 24 of applicant's specification.

12. Claims 7 to 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 10-265844 in IDS dated 5-03-04 in view of Japanese patent 9-165644 cited in IDS dated 8-14-03.

13. JP'844 discloses specific examples in Table 4 on page 6 which meet the claimed composition except does not include N as an alloying constituent. Japanese patent 9-165644 in paragraph [0018], however, teaches an analogous low ratio steel wherein small amounts of N of up to 0.003% would be desirable to further enhance strength by forming TiN and NbC. Since strength would be desirable and sought by JP'844, then it would be an obvious modification to include. In any event, the differences between

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prior art and present invention would amount to no more than routine optimization of N, which is well within the skill of the art and productive of no new and unexpected results.

14. Moreover, note English abstract of JP'844, wherein microstructure is a ferritic and bainite and/or martensite phase, such that ferrite has a grain size of 5 to 40microns which overlaps with applicants range of at least 20 microns. Also note specific examples 6,7 and 9 in Table 5 have ferrite grain size greater than 20 microns.

15. Although prior art does not teach the bainite or martensite at 1 to 15 vol% as cited by claims 8, 12 and 13, such would be expected since compositional and microstructure, and properties are closely met, and in absence of proof to the contrary.


16. Furthermore, the English abstract of JP'844 disclose additional elements in wt% ranges which overlap and suggest those recited by dependent claims 9,10, 14 and 15.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Yee whose telephone number is 571-272-1253. The examiner can normally be reached on Monday-Friday from 6:00 to 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Deborah Yee
Primary Examiner
Art Unit 1742

dy